

**MAGNETICALLY ACTUATED MICRO-ELECTRO-MECHANICAL  
APPARATUS AND METHOD OF MANUFACTURE****Abstract of the Disclosure**

An array of magnetically actuated MEMS mirror devices is provided  
5 having stationary magnets configured to provide strong magnetic fields in the  
plane of the mirrors without any magnets or magnet-system components in the  
plane of the mirrors. Also, a magnetically actuated mirror device is provided  
that includes an improved actuation coil configuration that provides greater  
torque during mirror actuation. In addition, a mechanism is provided to detect  
10 the angular deflection of a moveable mirror. Also, an improved process is  
provided for manufacturing MEMS mirror devices.